

Remarks/Arguments

Claims 1-14 are pending and are rejected.

Claim 4 is amended to correct a typographical error.

Claim Rejection 35 U.S.C. § 102(b)

Responsive to the rejection of claims 1-3 and 7-9 under U.S.C. § 102(b) as anticipated by EP 0584718 A1 ("Albean"), applicant respectfully submits that Albean does not anticipate these claims as discussed below.

For example, claim 1 recites a stereophonic expansion circuit having (L+R) and (L-R) signal paths, comprising means for processing (L+R) and (L-R) stereo signals, and means for tonal compensation of the (L+R) signal. Applicant respectfully submits that Albean does not disclose or suggest a stereophonic expansion circuit including means for tonal compensation of the (L+R) system.

Albean discloses a wideband expander (element 44 in FIG. 4), which can be adapted, so that a DBX expander (element 60 in FIG. 4) can be used. See col. 3, lines 40-43. As well known in the art, an input composite DBX signal includes a pilot tone with a center frequency of 15.734 KHz (1H), a L+R signal in a frequency band below 1H, an L-R signal with a center frequency twice of 1H (the second harmonic of the pilot tone), and a SAP signal with a center frequency five times of 1H (the fifth harmonic of the pilot tone). Thus, in order to eliminate the SAP signal from the incoming composite signal, a low pass filter 48 is used, which is a notch filter having its maximum attenuation at a frequency close to but higher than the fifth harmonic. See col. 3, lines 45-50. To retrieve the L+R signal, a LPF 53 is used, so that the L-R signal and other signals are eliminated. See col. 4, lines 26-28. The retrieve L+R signal is directly fed to

a matrix 38, where L and R signals are produced. See FIG. 4. As such, no tonal compensation means are present to process the retrieved L+R signal before the retrieved L+R signal is fed to the matrix 38. The matrix 38 does not provide tonal compensation to the L+R signal. It simply combines the L+R and L-R signals to produce the L and R signals.

Applicant disagrees that the combination of filters 48, 53, and 38 should be interpreted as the tonal compensation means of the L+R signal, as alleged, because none of the three elements provides tonal compensation to the retrieve L+R signal as discussed above.

In light of the fact that Albean does not disclose or suggest tonal compensation means for the L+R signal, applicant submits that claim 1, and dependent claims 2-9, are patentable over Albean.

Claim Rejection 35 U.S.C. § 102(e)

Responsive to the rejection of claim 10 under U.S.C. § 102(e) as anticipated by US 6,169,973 ("Tsutsui"), applicant respectfully submits that Tsutsui does not anticipate claim 10 for reasons discussed below.

Claim 10 recites a stereophonic expansion circuit having an (L+R) and (L-R) signal paths wherein the tonal compensation of the (L+R) signal path is approximately complementary to the tonal frequency response of the (L-R) signal path.

By contrast, Tsutsui discloses a decoding circuit on FIG. 17. The decoding circuit takes an encoded codestring 210a, separates the codestring 210a into a signal of 210b of the L+R channel and a signal 210c of the L-R channel. See col. 17, lines 8-11. The encoded L+R signal 210b and the encoded signal 210c are respectively decoded

by decoding circuits 211b and 211c to produce a decoded L+R signal 210d and a decoded L-R signal 210e. See col. 7, lines 12-17 and FIG. 17. The decoded L+R signal 210d and the decoded L-R signal 210e are inversely transformed by respective inverse transform circuits 211d and 211e to produce a signal 210f of the L+R channel and a signal 210g of the L-R channel, respectively. See col. 17, lines 18-24 and FIG. 17. At this point, the L+R and L-R are recovered, and fed to a channel conversion circuit 211f to produce the L and R signals. See col. 17, lines 25-32.

As discussed above, nowhere does Tsutsui disclose or suggest that the L+R signal is tonally compensated, let alone approximately compensated in complement to the tonal frequency response of the L-R signal path, as recited in claim 10.

Applicant strongly disagrees that Tsutsui, at col. 17, lines 25-32, discloses that the L+R signal is obtained by the inverse transform of the L-R circuit, as alleged. The cited portion clearly states the following: "The signal 210f of the (L+R) channel, obtained by the inverse transform by the inverse transform circuit 211d," As described above, the input signal to the inverse transform circuit 211d is the decoded L+R signal 210d. Similarly, the inverse transform circuit 211e inversely transforms the decoded L-R signal 210e to produce the L-R signal 210g. Thus, Tsutsui does not disclose or suggest that an L-R signal is inversely transformed to produce an L+R signal as alleged.

In light of the fact that Tsutsui disclose or suggest that the L+R signal is tonally compensated, let alone approximately compensated in complement to the tonal frequency response of the L-R signal path, as recited in claim 10, applicant submits that claim 10 is patentable over Tsutsui.

Claim Rejection 35 U.S.C. § 103(a)

a) Claim 4 unpatentable over Albean in view of Tsutsui

Responsive to the rejection of claim 4 under U.S.C. § 103(a) as being unpatentable over Albean as applied to claim 2 above in view of Tsutsui, since claim 4 is amended to depend directly from claim 1, applicant will apply Albean to claim 1 in the following analysis.

Since Tsutsui also does not disclose or suggest that the L+R signal is tonally compensated as discussed above with respect to claim 10, Tsutsui fails to cure the defect of Albean as applied to claim 1. As such, claim 4 is patentable for its dependence from claim 1.

b) Claims 5 and 6 unpatentable over Albean in view of Yamada

Responsive to the rejection of claims 5 and 6 under U.S.C. § 103(a) as being unpatentable over Albean as applied to claim 1 above in view of US 4,392,114 ("Yamada"), applicant submits that these two claims are patentable over Albean and Yamada because Yamada fails to cure the defect of Albean as applied to claim 1 from which claims 5 and 6 directly or indirectly depend.

Yamada discloses an audio device having a tone control canceling circuit. Nowhere does Yamada disclose or suggest an L+R path. Thus, Yamada does not disclose or suggest tonal compensation means for the L+R signal.

c) Claim 10 unpatentable over Albean in view of Tsutsui

Responsive to the rejection of claim 10 under U.S.C. § 103(a) as being unpatentable over Albean as applied to claim 2 above in view of Tsutsui, applicant submits that claim 10 is patentable over these two references because, as discussed

above, both references fail to disclose or suggest that the L+R signal is tonally compensated.

d) Claims 11-14 unpatentable over Albean in view of Yamada

Responsive to the rejection of claims 11-14 under U.S.C. § 103(a) as being unpatentable over Albean as applied to claim 1 above in view of Yamada, applicant submits that these claims are patentable over Albean and Yamada because Yamada fails to cure the defect of Albean as applied to claim 10 from which these claims directly or indirectly depend.

As discussed above in section b), Yamada does not disclose or suggest that an L+R signal is tonally compensated. Thus, Yamada fails to cure the defect of Albean as applied to claim 10.

Conclusion

Having fully addressed the Examiner's objections and rejections it is believed that, in view of the preceding amendments and remarks, this application stands in condition for allowance. Accordingly, reconsideration and allowance are respectfully solicited. If, however, the Examiner is of the opinion that such action cannot be taken, the Examiner is invited to contact the applicant's attorney at (609) 734-6813, so that a mutually convenient date and time for a telephonic interview may be scheduled.

Fee

No fee is believed due. However, if a fee is due, please charge the fee to Deposit Account 07-0832.

Respectfully submitted,

By:  _____
Reitseng Lin

Reg. No. 42,804

Phone (609) 734-6813

Patent Operations
Thomson Licensing Inc.
P.O. Box 5312
Princeton, New Jersey 08540
September 3, 2004

CERTIFICATE OF MAILING

I hereby certify that this amendment is being deposited with the United States Postal Service as First Class Mail, postage prepaid, in an envelope addressed to [Mail Stop Amendment], Commissioner for Patents, Alexandria, Virginia 22313-1450 on:

9-3-04
Date

Karen Schleich